

REMARKS

Claims 1-55 are pending in the application.

Claims 1-55 have been rejected.

Claims 1, 19, 34, and 41 have been amended.

Rejection of Claims under 35 U.S.C. § 101

Claims 1, 19, 34 and 41 stand rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter. Applicants respectfully traverse these rejections in view of present amendments to independent Claims 1, 19, 34, and 41. Support for these amendments can be found throughout the originally-filed Application, and at least at paragraphs 36, 81, 105 and 106, and Figures 3, 8, and 10.

In particular, Claim 34 now provides for a computer readable storage medium storing the program instructions. Applicants note that the computer readable storage medium storing program instructions executable by a processor is a tangible embodiment. *See* Application ¶¶ 105 (e.g., “Memory 1002 stores program instructions executable by processor 1001”), 106 (“The program instructions and data implementing mask and lookup table entry generator 1005 can be stored upon various computer readable media such as memory 1002 . . . CD (Compact Disc), DVD (Digital Versatile Disc), hard disk, optical disk, tape device, floppy disk, and the like”). Thus signals and carrier waves are excluded, and Applicants respectfully submit that the Examiner’s concerns are addressed thereby.

Applicants therefore respectfully request the Examiner’s reconsideration and withdrawal of the rejection to these independent claims and all claims depending therefrom.

Rejection of Claims under 35 U.S.C. § 102

Claims 1, 2, 6, 7, 16, 19, 20, 24, 25, 34, 35, 37, 39, 40, 41, 42, 46, 47, and 53 stand rejected under 35 U.S.C. § 102(b) as purportedly being unpatentable over U.S. Patent Publication No. 2003/0223402 naming Sanchez et al. as inventors (“Sanchez”).

The Office Action relies on Sanchez to teach the first lookup table that identifies a portion of a second lookup table of Claim 1. *See* Office Action, p. 4. However, the cited sections of Sanchez only disclose lookup tables that identify interface identifiers. The Office Action also relies on Sanchez to teach the act of accessing the portion of the second lookup table based on a second portion of the packet header of Claim 1. *Id.* However, without disclosure of a first lookup table identifying a portion of a second lookup table, the cited sections of Sanchez also fail to disclose accessing the portion of the second lookup table based on a second portion of the packet header. Accordingly, the cited sections of Sanchez fail to teach or fairly suggest the features of Claim 1.

The cited sections of Sanchez disclose a Multicast Forwarding Information Table (FIT) and a Unicast Routing Table, which the Office Action equates to the claimed first and second lookup tables. *See* Office Action, p. 4 (citing Sanchez ¶¶ 8, 32). In order for Sanchez’ tables to behave in a manner like that of the claimed first and second lookup tables, one of Sanchez’ tables must identify a portion of the other table. *See, e.g.*, Claim 1. However, both of Sanchez’ tables contain interface identifiers that do not identify a portion of another table. *See* Sanchez ¶ 8, Figs. 1, 2. Further, without disclosure of an identified portion of the second lookup table, the cited sections of Sanchez cannot disclose accessing such a portion of the second lookup table, as claimed.

Additionally, Applicants respectfully note that the cited sections of Sanchez disclose that only one of Sanchez’ tables will be accessed to perform an RPF check for a given packet header,

depending on whether the RPF Flag is set. *See* Sanchez ¶¶ 8, 39, Fig. 4. In contrast, both of the claimed lookup tables are accessed in Claim 1 based on the same packet header. Accordingly, the cited sections of Sanchez fail to teach or fairly suggest the features of Claim 1. For similar reasons, the cited sections of Sanchez also fail to teach or fairly suggest the features of Claim 41.

Regarding Claim 19, the Office Action relies on Sanchez to teach the claimed first lookup table configured to identify first information, where the first information identifies a portion of the second lookup table. *See* Office Action, p. 6. For reasons similar to those provided above, the cited sections of Sanchez fail to teach or fairly suggest the claimed first lookup table configured to identify first information, where the first information identifies a portion of the second lookup table.

The Office Action also relies on Sanchez to teach the claimed first lookup table that is configured to identify first information in response to receiving a first key generated from a first portion of the packet header. *See* Office Action, pp. 6. However, Sanchez' tables are not disclosed to identify information in response to receiving a key, as claimed. Finally, the Office Action relies on Sanchez to teach the claimed lookup restriction unit that is configured to prevent a second key generated from a second portion of the packet header from matching any second lookup table entry that is not comprised in the portion of the second lookup table identified by the first information. *See* Office Action, p. 7. However, the cited sections of Sanchez fail to disclose preventing lookups from matching entries that are not comprised in the identified portion of the second table, as claimed. Accordingly, the cited sections of Sanchez fail to teach or fairly suggest the features of Claim 19.

The cited sections of Sanchez fail to disclose anything remotely resembling a key that is generated from a portion of the packet header, as claimed. *See* Sanchez ¶ 8. Without such disclosure, the cited sections of Sanchez cannot disclose Sanchez' Multicast FIT or Unicast

Routing Table being configured to identify information in response to receiving such a key, as claimed.

The cited sections of Sanchez also fail to disclose anything remotely resembling an act like that of preventing a second key from matching any second lookup table entry that is not comprised in the portion of the second lookup table identified by the first information, as claimed. As discussed above, Sanchez fails to disclose identifying a portion of the second lookup table. Without such disclosure, the cited sections of Sanchez cannot disclose preventing the second key from matching a second lookup table entry outside of the identified portion of the second lookup table. Further, the cited sections of Sanchez fail to disclose restricting lookup matches in either the Multicast FIT or Unicast Routing Table in a manner like that of Claim 19. *See, e.g.*, Sanchez ¶ 8. Accordingly, the cited sections of Sanchez fail to teach or fairly suggest the features of Claim 19. For similar reasons, the cited sections of Sanchez also fail to teach or fairly suggest the claim features of Claim 34.

For at least these reasons, Applicants submit that the cited sections of Sanchez fail to teach or fairly suggest the claim features of independent Claims 1, 19, 34, and 41, and that such claims, and all claims depending therefrom, are in condition for allowance. Applicants therefore respectfully request the Examiner's reconsideration and withdrawal of the rejections to these claims and an indication of the allowability of same.

Rejection of Claims under 35 U.S.C. § 103

Claims 3-5, 17, 18, 21-23, 32, 33, 36, 43-45, 54, and 55 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over Sanchez in view of U.S. Patent Publication No. 2001/0040895 naming Templin as inventor ("Templin"). Claims 8-12, 14, 15, 26, 27, 30, 31, 38, 48, 49, and 52 stand rejected under 35 U.S.C. § 103(a) as purportedly being unpatentable over

Sanchez in view of U.S. Patent No. 7,466,703 issued to Arunachalam et al. ("Arunachalam"). Claims 13, 28, 29, 50, and 51 are rejected under 35 U.S.C. § 103(a) s being unpatentable over Sanchez in view of Arunachalam and further in view of Templin. Applicants respectfully traverse these rejections for at least the reasons set forth above with respect to independent claims 1, 19, 34, and 41.

CONCLUSION

Applicants submit that all claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicant hereby petitions for such extensions. Applicant also hereby authorizes that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to deposit account 502306.

Respectfully submitted,

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